

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing Of Claims:**

1-10 (Canceled)

11. (New) An afterburner for afterburning a residual gas from at least one of a reforming process and a fuel cell process, comprising:

at least one nozzle to meter fuel and the residual gas into a combustion chamber;  
at least one device for providing an air supply; and  
a heat-resistant, open-pore ceramic foam for at least partially filling the combustion chamber.

12. (New) The afterburner as recited in Claim 11, wherein:  
the afterburner is for a chemical reformer intended for procurement of hydrogen.

13. (New) The afterburner as recited in Claim 11, wherein:  
the ceramic foam includes silicon carbide.

14. (New) The afterburner as recited in Claim 11, wherein:  
the ceramic foam includes open pores via reticulation.

15. (New) The afterburner as recited in Claim 11, wherein:  
the ceramic foam can be heated electrically.

16. (New) The afterburner as recited in Claim 11, wherein:  
the ceramic foam is in good heat-conducting contact with at least one part of a wall of the combustion chamber.

17. (New) The afterburner as recited in Claim 11, further comprising:  
a catalytic layer for at least partially covering the ceramic foam.

18. (New) The afterburner as recited in Claim 17, wherein:  
the catalytic layer includes platinum.
19. (New) The afterburner as recited in Claim 11, further comprising:  
an ignition device.
20. (New) The afterburner as recited in Claim 19, wherein:  
the ignition device includes one of an electric glow filament and a glow plug.
21. (New) The afterburner as recited in Claim 19, wherein:  
the ignition device is one of installed and formed one of:  
between the ceramic foam and the at least one nozzle, and  
in the ceramic foam.
22. (New) The afterburner as recited in Claim 11, wherein:  
the at least one nozzle includes one of a swirl nozzle and a multi-orifice nozzle.